

45. (NEW) The apparatus of claim 44, wherein the detecting of the tilt error signal further comprises comparing a phase of a sum of detection signals from another one of the outer light regions located in the first diagonal direction and from another one of the inner light regions located in the second diagonal direction, with a phase of a sum of detection signals from another one of the outer light regions located in the second diagonal direction and from another one of the inner light regions located in the first diagonal direction, to output a second phase comparison signal, the tilt error signal further being detected from the second phase comparison signal.

46. (NEW) The apparatus of claim 45, wherein the detecting of the tilt error signal further comprises adding the first and second phase comparison signals.

REMARKS

In accordance with the foregoing, the Preliminary Amendment is submitted to add new claims 35-46 and to amend the specification to improve form.

It is respectfully requested that this Preliminary Amendment be entered in the above-referenced application.

If any further fees are required in connection with the filing of this Preliminary
Amendment, please charge same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date: 7/3/01

By: 
Michael D. Stein
Registration No. 37,240

700 Eleventh Street, NW, Suite 500
Washington, D.C. 20001
(202) 434-1500

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE SPECIFICATION:

Please **REPLACE** the paragraph beginning at page 15, line 16 with the following paragraph:

-- In addition, as shown in FIG. 11, the tilt error signal S detected by the inventive error signal detection apparatus 5 is less affected by detrack, compared with the tilt error signal [SN] S' output from the error signal detection apparatus shown in FIG. 2. According to the preferred embodiment of the error signal detection apparatus of the present invention, although the pit depths of the recording medium are different, the tilt error signal having reduced offset can be detected with respect to the radial shifting of the objective lens 7.--